

DRAFT
ADDENDUM
to the
1991 CLEAN AIR PLAN
ENVIRONMENTAL IMPACT REPORT

Prepared for the
1997 Clean Air Plan

Air Pollution
& Air quality mgmt
- Env aspects



INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

OCT 2 1997

UNIVERSITY OF CALIFORNIA

September 1997

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
Phone: (415) 771-6000
Fax: (415) 749-4741
Web: www.baaqmd.gov

TABLE OF CONTENTS

PAGE

INTRODUCTION	1
PREVIOUS ENVIRONMENTAL ANALYSIS.....	1
1997 ADDENDUM TO THE 1991 CAP EIR.....	2
PROJECT DESCRIPTION.....	4
New and Revised Stationary Source Measures Proposed in the Draft 1997 CAP ..	4
New and Revised Mobile Source Measures Proposed in the Draft 1997 CAP	7
New and Revised Transportation Control Measures Proposed in the Draft 1997 CAP	8
SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS ASSOCIATED WITH PROPOSED NEW OR REVISED CONTROL MEASURES IN THE DRAFT BAY AREA 1997 CLEAN AIR PLAN	11

INTRODUCTION

As required by the California Clean Air Act, the Bay Area Air Quality Management District (Air District) has prepared the *Draft Bay Area 1997 Clean Air Plan* (1997 CAP). The 1997 CAP outlines a strategy to reduce emissions of ozone precursors in order to attain the state ambient air quality standard for ground-level ozone in the San Francisco Bay Area. The 1997 CAP is a revision to the 1994 CAP. The 1997 CAP continues the pollution reduction strategy that was originally established in the region's first plan to attain the state ozone standard, the 1991 CAP, and revised in the 1994 CAP.

The control measures included in the 1997 CAP are divided among stationary source measures, mobile source measures and transportation control measures (TCMs). The 1997 CAP includes changes in the organization and scheduling of some 1994 CAP control measures and also includes 12 new proposed stationary and mobile source measures, as well as two new TCMs. Other measures previously described in the 1994 CAP have been revised. The new and revised control measures are summarized below, under Project Description, and are described in detail in Appendices E (TCMs) and F (stationary and mobile source measures) of the 1997 CAP.

PREVIOUS ENVIRONMENTAL ANALYSIS

Pursuant to the requirements of the California Environmental Quality Act (CEQA), Public Resources Code 21000 et seq., the Air District Board of Directors in October, 1991 certified an environmental impact report (EIR) for the 1991 CAP. This EIR was a program EIR, according to the CEQA Guidelines Section 15168. A program EIR is an EIR evaluating a series of actions that can be characterized as one large project and are related either:

- As logical parts in the chain of contemplated actions,
- In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
- As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways. (CEQA Guidelines Section 15168(a)(2)-(4)).

The 1991 CAP EIR concluded that while implementation of the CAP would result in numerous benefits to public health and safety through improved air quality, reduced motor vehicle use and other impacts, the CAP also could have some secondary adverse environmental impacts. The 1991 CAP EIR identified mitigation measures to eliminate or lessen the severity of these potential adverse environmental impacts.

In December, 1994 the Air District adopted an Addendum to the *1991 CAP EIR*. The 1994 Addendum evaluated the environmental impacts of the new and revised control measures in the *1994 CAP*. The 1994 Addendum concluded that the new and revised control measures in the *1994 CAP* would not result in any new environmental impacts nor require mitigation measures not previously identified in the *1991 CAP EIR*.

1997 ADDENDUM TO THE 1991 CAP EIR

This Draft Addendum to the *1991 CAP EIR* examines the potential environmental impacts associated with the new and revised control measures proposed in the *Draft 1997 CAP*. This Addendum has been prepared pursuant to the requirements of CEQA and in accordance with the CEQA Guidelines published by the state Office of Planning and Research. This Addendum is intended to inform the public and the Air District Board of Directors regarding potential environmental impacts that may occur with the implementation of the new and revised measures proposed in the *Draft 1997 CAP*.

According to CEQA Guidelines Section 15164, an addendum to a previously certified EIR shall be prepared if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. According to Section 15162, a Subsequent EIR would not be required if:

- (1) There are no substantial changes proposed in the *Draft 1997 CAP* which will require major revisions to the *1991 CAP EIR* due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
- (2) There are no substantial changes to the surrounding circumstances of the *1997 CAP* which would require major revisions of the *1991 CAP EIR* because of the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
- (3) There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the *1991 CAP EIR* was certified as complete, which shows the following:
 - (a) The *1997 CAP* will have one or more significant environmental effects not discussed in the *1991 CAP EIR*.
 - (b) Significant effects examined in the *1991 CAP EIR* will be substantially more severe than shown in the previous EIR.
 - (c) Mitigation measures or project alternatives previously found not to be feasible would in fact now be feasible and would substantially reduce or mitigate

one or more significant effects of the project, but the Air District declined to adopt the mitigation measure or alternative.

(d) Mitigation measures or project alternatives which are considerably different from those analyzed in the *1991 CAP EIR* would substantially reduce one or more significant effects on the environment, but the Air District declined to adopt the mitigation measure or alternative.

In preparing this Draft Addendum, Air District staff reviewed information from a variety of sources, including the following: the *1991 CAP EIR*, other Air District CEQA documents, CEQA documents prepared by other California air districts for measures similar to those proposed in the *1997 CAP*, various technical documents used in the development of the proposed measures, and public comments on the proposed new and revised control measures

The attached table, "Summary of Potential Environmental Impacts Associated with Proposed New or Revised Control Measures in the Draft Bay Area 1997 Clean Air Plan," summarizes the potential environmental impacts of the new and revised measures proposed in the *Draft 1997 CAP*. The table lists each control measure, describes potential adverse impacts and mitigation measures previously identified in the *1991 CAP EIR*, and indicates the significance of those impacts before and after mitigation. (The *1991 CAP EIR* describes the criteria used to determine the significance of potential impacts.) It should be noted that for some control measures, possible new impacts have been identified, while with other control measures there are no identified environmental impacts. In each case where potential impacts are identified, Air District analysis has concluded that the new impacts would not occur or are less than significant because of the definition and elements of the control measure itself. Consequently, no new, previously unconsidered significant impacts have been identified and no new mitigation measures are required for these control measures.

Based on the environmental analysis summarized in the attached table, the Air District has concluded that the new and revised control measures proposed in the *1997 CAP* do not constitute changes that rise to the level of change that requires a subsequent EIR, and thus an addendum is the appropriate type of CEQA document for the *1997 CAP*. Specifically, the Air District has concluded that:

1) The new and revised control measures proposed in the *Draft 1991 CAP* do not result in new significant environmental effects not previously considered, nor increase the severity of previously identified significant effects. The *Draft 1997 CAP* includes 14 new or revised stationary and mobile source measures and 8 new or revised transportation measures. The Air District identified potential adverse environmental impacts for 9 of the 22 new or revised measures, but all of these impacts were deemed less than significant.

2) The circumstances under which the project will be undertaken will not result in new significant environmental effects nor increase the severity of previously identified significant effects. Despite hot weather and high ozone readings during the summers of 1996 and 1996, ozone trends show a one percent decline per year, on average, in ozone levels since the late 1980s. (See CAP Volume I, Appendix C.) Implementation of the *Draft 1997 CAP* will continue to reduce ozone precursor emissions through the adoption of all feasible measures on an expeditious schedule.

3) There is no new information of substantial importance which shows that the proposed new and revised control measures will result in significant environmental effects not previously discussed in the *1991 CAP EIR* nor increase the severity of any previously identified significant effects. Nor is there any new information which shows that mitigation measures or project alternatives previously found to be not feasible would now be feasible and would substantially reduce significant effects of the project, or that new mitigation measures or alternatives not analyzed in the *1991 CAP EIR* would substantially reduce any significant environmental effects. The preparation of the triennial revision to the CAP and the associated environmental review involved extensive analysis of recent research regarding air pollution control strategies. The new and revised control measures proposed in the *Draft 1997 CAP* reflect the Air District's conclusions regarding those strategies that would be most cost-effective and have the least secondary adverse effects.

PROJECT DESCRIPTION

As previously noted, some of the measures proposed in the *1997 CAP* were previously described in the *1994 CAP*, while other measures are new or have been revised. Below is a summary of all proposed *1997 CAP* control measures that are new or have undergone significant revision since 1994.

New and Revised Stationary Source Measures Proposed in the Draft 1997 CAP

B2(h) Low Emitting Retrofits for Slotted Guide Poles

Organic liquid storage tanks with floating roofs are often equipped with slotted guide poles to hold the roof in place and allow tank gauging and sampling. Uncontrolled slotted guide poles increase fugitive emissions of reactive organic gases (ROG) due to evaporation of the volatile contents. This measure would reduce emissions by requiring installation of retrofit kits to reduce fugitive emissions or installation of solid guide poles instead of slotted guide poles.

B2(i) Tank Inerting Requirements

The vapor space above organic liquid in fixed roof storage tanks is commonly filled with an oxygen-free gas, typically nitrogen, natural gas or refinery gas. This is referred to as inerting. Some tanks are inerted with a slight, constant flow of gas. ROG emissions result from venting the excess inerting gas to the ambient air. This measure would prohibit the use of a constant flow of inerting gas into a tank unless the vapors carried with the excess gas are controlled and tanks that are inerted are vapor tight. This measure may require the use of a back pressure regulator to maintain a positive pressure in the tank head space instead of a constant flow setup. Only enough inert gas to pressurize the head space would be needed. In addition, the tank headspace must be maintained to be vapor tight. Hence vapor tight relief valves must be used and other tank fittings on the tank roof would need to be maintained to be vapor tight.

B8 Emission Reductions from Gasoline Dispensing Facilities (Revised from 1994 CAP)

Most gasoline dispensing facilities (GDFs) in the Bay Area are equipped with Phase I vapor recovery control on transfer of gasoline into underground storage tanks and Phase II vapor recovery control on motor vehicle refueling operations. This measure would reduce ROG emissions from GDFs by requiring equipment modifications to improve the efficiency of existing vapor recovery systems and to require that only vapor recovery systems compatible with the federally mandated Onboard Refueling Vapor Recovery systems on new cars be used.

C3(b) Valve and Flange Fitting Control at Refineries and Chemical Plants

Fugitive emissions of ROG occur at refineries and chemical plants as a result of leaks at valves, flanges and other fittings. The Air District currently regulates fugitive emissions at refineries and chemical plants. This measure would reduce fugitive ROG emissions by requiring more stringent inspection and maintenance programs at these facilities and requiring improved gaskets or improved fitting design.

F3(b) Further Promotion of Energy Efficiency (Revised from 1994 CAP)

This measure would encourage actions to improve energy efficiency in the Bay Area. By reducing energy demands, NO_x emissions will decrease due to reduced fossil fuel combustion. This measure relies on education and incentives rather than regulation. The Air District would continue to develop partnerships with industry, cities and counties, federal and state agencies, trade groups and environmental organizations, and promote energy efficiency through outreach, training, technical assistance and recognition.

F5 Emission Reduction Credits to Mitigate Variances or Violations

Existing law provides the mechanism for sources of air pollutants to generate and bank emission reduction credits (ERCs). This measure, which is based on Health and Safety Code Section 40709, would allow facility and source operators to surrender to the Air District ERCs to mitigate increases in air pollutants that result from variances or violations of emission limits in existing Air District rules.

F6 Parametric Monitoring to Enhance Compliance

This measure will result in emission reductions by providing simple requirements for monitoring selected process variables that are reliable indicators of the parameters under which sources and abatement equipment must operate to stay in compliance with Air District rules. The measure would use source tests to determine performance specifications that define compliance with emissions limits. Monitoring compliance with these performance specifications, typically temperature, pressure and flow rate, will aid industries in maintaining compliance with specific emissions limits.

F7 Easing of Administrative Requirements for Voluntary Use of Low Emitting Technology

Typically, Air District rules accommodate a range of technology, including technology which might be significantly lower emitting than the rules require. This measure would provide for a voluntary reduction in ROG emissions by easing administrative requirements, such as those related to record keeping or monitoring standards, for facilities that use substantially lower emitting technology and certify that they will continue to meet the standards that are more stringent than required by Air District rules. The cost savings associated with reduced administrative requirements would provide an incentive to explore technologies that go beyond rule requirements.

F8 Limitations on Solvents Based on Relative Reactivities

Organic compounds vary greatly in reactivity, or the rate and degree at which they interact with other pollutants in the atmosphere to form ozone. Air District organic compound rules generally are based on mass emission rates. This measure would involve the Air District to amending its ROG rules based on a consideration of relative reactivity in addition to or instead of existing mass emission limits.

F9 Promotion of the Development and Use of High Albedo (Reflecting) Materials for Roofing and Road Surfaces

Building materials with low reflectivity, when present over a large urban area, result in increased ambient temperatures (the "heat island" effect). High temperatures contribute

to air pollution in several ways. Higher ambient temperatures cause increased photochemical production of ozone. They also increase electricity demand for air conditioning, resulting in increased NO_x emissions from fossil-fueled power plants. Higher temperatures also cause increased evaporation of organic liquids and solvents. This measure would encourage the development and use of high albedo (reflecting) roofing and road surface materials in order to lower ambient summertime temperatures in urban areas. This measure would not involve an Air District rule, but rather would rely on outreach to local governments, trade organizations, contractors and the public to promote the development and use of these materials.

G3 Seasonal Controls on Organic Liquid Storage Tank and Wastewater Separator Cleaning, and Refinery Shutdowns

Certain maintenance activities at oil refineries produce ROG emissions. Such activities include scheduled shutdown of refinery process units and cleaning of process tanks, oil-water separators and storage tanks. This measure would promote the shifting of such activities from the ozone season (June to mid-October) to months outside the ozone season, or provide options for control of emissions when the work must be done during the ozone season.

New and Revised Mobile Source Measures Proposed in the Draft 1997 CAP

M1(e) Emission Reduction Credits - Scrapping Lawn and Garden Equipment

The Air District currently has guidelines for the generation of mobile source emission reduction credits (MSERCs) through car scrapping programs. This measure would involve the development of a procedure to award emission reduction credits for the voluntary scrapping of high emitting lawn and garden equipment and their replacement with cleaner equipment. The MSERCs could be used to offset emissions from new or expanding stationary sources.

M1(f) Emission Reduction Credits - Scrapping Recreational Boat Engines

This measure would involve the development of a procedure to award emission reduction credits for the voluntary scrapping of high-emitting recreational boat engines and their replacement with cleaner engines. The credits could be used to offset emissions from new or expanding stationary sources.

M4 *Low Emission Vehicle Fleet Operations (Revised from 1994 CAP)*

This measure would encourage the introduction and use of electric vehicles (EVs) and natural gas vehicles (NGVs) in commercial motor vehicle fleets operating in the Bay Area. The Air District would continue to support efforts by local governments and other organizations to form clean fuels coalitions to promote the use of NGVs and EVs, and would enforce the requirements of California Vehicle Code Section 28113 concerning emissions limits for vehicles operated for compensation to transport passengers.

New and Revised Transportation Control Measures Proposed in the Draft 1997 CAP

TCM 1 *Support Voluntary Employer-Based Trip Reduction (Revised from 1994 CAP)*

State law now prohibits mandatory employer-based trip reduction programs. Additionally, public sector funding for transportation demand management programs has decreased. However, the need for such programs remains strong. This measure would support and encourage voluntary efforts by Bay Area employers to promote the use of commute alternatives by their employees. Possible activities would include: providing support for employer programs; continuation of the Air District's *Spare the Air* program; assisting employers with transportation fairs, regional promotions and other marketing events; and promotion of the Commuter Check transit subsidy program.

TCM 6 *Improve Interregional Rail Service (Revised from 1994 CAP)*

This measure seeks to provide alternative transportation service in selected heavily traveled interregional corridors. Increasing rail service in the San Jose-Oakland-Sacramento-Roseville corridor ("Capitol Corridor") continues to be a goal of this measure. Revisions to this measure since the 1994 CAP include a trial period of service in the San Jose-Stockton corridor and, ultimately, new or expanded service in three additional corridors.

TCM 8 *Construct Carpool/Express Bus Lanes on Freeways (Revised from 1994 CAP)*

This measure seeks to promote the use of carpools, vanpools and other high occupancy vehicles (HOVs). Implementation of MTC's *HOV Master Plan* and related HOV improvements continue to be components of this measure. Air quality beneficial revisions to this measure since the 1994 CAP include the following: HOV bypass lanes at

metered ramps, increased rideshare promotion/matching, changeable message signs/real-time information regarding HOV facilities, increased enforcement of occupancy and use restrictions, increased occupancy requirements at appropriate locations, extended hours of operation at appropriate facilities, and identification of potential freeway segments where conversion of mixed flow lanes to HOV lanes may be appropriate.

TCM 11 *Install Freeway/Arterial Traffic Operating Systems (Revised from 1994 CAP)*

This measure is intended to reduce congestion related emissions in the short term by improving the flow of traffic on the regional transportation network. Traffic Operations Systems (TOS) refers to a variety of operational strategies including traffic advisory signs, ramp metering, traffic surveillance by closed circuit TV and traffic data collection. Related operational strategies include TravInfo (traffic advisory information available via telephone, media and the Internet) and tow truck incident management. The 1994 CAP proposed TOS for implementation on up to 450 miles of Bay Area freeways. The 1997 CAP proposes to expand TOS to appropriate high volume arterials.

TCM 17 *Conduct Demonstration Projects (Revised from 1994 CAP)*

This measure would promote demonstration projects to encourage innovative approaches to reducing motor vehicle travel. Demonstrations of electronic toll collection continue to be a component of this measure. Other demonstration projects (new to the 1997 CAP) may include low emission vehicle refueling infrastructure and other measures to increase the use of low emission vehicles. As funding becomes available, demonstrations may be pursued to reduce emissions from the following: lawn and garden equipment, pleasure boats and jet skis, motor scooters and delivery vehicles. Measures to reduce diesel vehicle idling and to reduce emissions from unregistered vehicles may also be pursued.

TCM 18 *Implement Transportation Pricing Reform (Revised from 1994 CAP)*

This measure is intended to reduce motor vehicle use and emissions through a combination of pricing measures. Implementation of pricing measures would also secure additional revenue needed to fully fund other TCMs. Proposed measures include “smog-based” vehicle registration fees, increased gas taxes, feebates, congestion pricing and parking cash out. Many of these pricing measures were included in the 1994 CAP. The major revision is the addition of feebates on new vehicle purchases. Under a feebate system, fees would be added to the purchase price of vehicles with high emissions, while rebates would be subtracted from the price of vehicles with lower emissions.

TCM 19 *Advocate Planning and Design to Facilitate Pedestrian Travel*

This measure would encourage pedestrian travel by promoting plans and physical improvements to make walking safer and more convenient. Possible activities may include: local plans and zoning that promote land use patterns that facilitate walking, pedestrian-friendly design at new development, integrated street networks to facilitate walking, physical improvements such as sidewalks and benches, and traffic calming strategies.

TCM 20 *Promote Traffic Calming Measures*

This measure is intended to promote transit use, walking and bicycling by reducing traffic speeds and volumes. Traffic calming strategies would be encouraged in local general plans, capital improvement programs and congestion management programs. Possible activities could include the installation of physical barriers, traffic lane modifications, turning movement restrictions and reduced speed limits.

SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS
associated with
PROPOSED NEW OR REVISED CONTROL MEASURES
in the
DRAFT BAY AREA 1997 CLEAN AIR PLAN

Potential Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation	Reference
STATIONARY SOURCE MEASURES				
B2h Low Emitting Retrofits for Slotted Guide Poles No adverse environmental impacts associated with this measure have been identified.	N/A	N/A	N/A	N/A
B2i Tank Inerting Requirements No adverse environmental impacts associated with this measure have been identified.	N/A	N/A	N/A	N/A
B8 Emission Reductions from Gasoline Dispensing Facilities This measure would reduce the risk of explosion at GDFs by requiring that only vapor recovery equipment compatible with Onboard Vapor Recovery Systems in new cars may be used.	B	None Required	B	Measure description (CAP Appendix F)
C3b Valve and Flange Fitting Control at Refineries and Chemical Plants No adverse environmental impacts associated with this measure have been identified.	N/A	N/A	N/A	N/A

Potential Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation	Reference
F3b Further Promotion of Energy Efficiency No adverse environmental impacts associated with this measure have been identified.	N/A	N/A	N/A	N/A
F5 Emission Reduction Credits to Mitigate Variances or Violations No adverse environmental impacts associated with this measure have been identified.	N/A	N/A	N/A	N/A
F6 Parametric Monitoring to Enhance Compliance Air pollutant emissions could increase at certain facilities if existing requirements for continuous emissions monitors (CEMs) were relaxed.	LS	The Air District does not intend to relax existing CEM requirements. Rather, this measure would apply at facilities that do not have continuous monitoring requirements.	LS	Measure description (CAP Appendix F)
F7 Easing of Administrative Requirements for Voluntary Use of Low Emitting Technology No adverse environmental impacts associated with this measure have been identified.	N/A	N/A	N/A	N/A

Potential Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation	Reference
G3 Seasonal Controls on Organic Liquid Storage Tank and Wastewater Separator Cleaning, and Refinery Shutdowns				
<p>Additional pollution control equipment on tanks, separators and vessels could increase risk for workers by restricting egress.</p>	LS	<p>This measure would not require closing of all tank exit points. Assuring safe egress for workers cleaning tanks would be addressed during the rule development process. The Air District would assure that any required controls comply with OSHA requirements.</p>	LS	<p>Measure description (CAP Appendix F)</p>
<p>Use of portable incinerators to control emissions from tank cleaning could expose workers to safety risk due to increased risk of explosion.</p>	LS	<p>This measure would not require use of portable incinerators. Other methods, such as carbon adsorption or tank cleaning by remote, unmanned systems may be available. During rule development, the Air District would assure that any required controls comply with all OSHA requirements.</p>	LS	<p>Measure description (CAP Appendix F)</p>

Potential Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation	Reference
MOBILE SOURCE MEASURES				
<p>M1e Emission Reduction Credits - Scrapping Lawn and Garden Equipment</p> <p>Implementation of the program could result in localized emissions increases at specific facilities if facilities elect to use credits to provide offsets for new sources.</p> <p>If the Air District develops an Interchangeable Emission Reduction Credit program, implementation of the program could allow specific existing sources to forego localized emission reductions otherwise required by Air District regulations.</p>	LS	<p>Under existing Air District regulations, emissions credits generated through this program could be used only to provide new source offsets. Any new or modified source seeking to use credits for offsets would be subject to the Air District's New Source Review requirements and Risk Management Policy, including the use of Best Available Control Technology (BACT) and Toxics BACT. These processes would ensure that emissions of criteria and toxic air pollutants from new and modified sources would not cause significant adverse effects on nearby residents.</p> <p>The possibility for existing sources to use these credits, and the potential environmental impacts that could result, will be addressed during the Air District's development and analysis of an Interchangeable Emissions Reduction Credit rule.</p>	LS	<p>Negative Declaration for Air District Manual of Procedures Volume VIII, Mobile Source Emission Reduction Credits, BAAQMD, 8/94; Staff memorandum to Air District Board of Directors re: Vehicle Buy Back Program, 9/2/94</p>

Potential Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation	Reference
M1f Emission Reduction Credits - Scrapping Recreational Boat Engines Implementation of the program could result in localized emissions increases at specific facilities.	LS	See M1e.	LS	See M1e
M4 Low Emission Vehicle Fleet Operations Implementation of this measure would slightly increase electrical usage for vehicles and electricity distribution system development, which would increase human exposure to electro-magnetic fields	LS	None required.	LS	1991 CAP EIR, pages 4.5-11 to 4.5-12
TRANSPORTATION MEASURES				
TCM1 Support Voluntary Employer-Based Trip Reduction No adverse environmental impacts associated with this measure have been identified.	N/A	N/A	N/A	N/A
TCM6 Improve Intercity Rail Service This measure would encourage the use of new rail transit. Localized noise impacts would occur in areas adjacent to the rail lines, if ambient noise levels would exceed local or state noise standards or if the adjacent areas are currently designated as noise impacted.	S	Mitigations include adequate separation of development areas from rail lines, construction of sound barriers, installation of landscape noise buffer, installation of noise insulation in residential units and other design techniques, and in coordination with local general plans.	LS	1991 CAP EIR, pages 4.11-14 to 4.11-15

Potential Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation	Reference
<p>TCM8 Construct Carpool/Express Bus Lanes on Freeways</p> <p>Construction of new HOV facilities would result in construction-related emissions which could cause local exceedances of air quality standards.</p>	S	Emissions would be reduced by minimizing idling time for all heavy equipment and frequent exhaust system inspection and maintenance. BAAQMD would encourage project sponsors to require contractors to inspect sources of fugitive dust and coordinate control measures.	LS	1991 CAP EIR, pages 4.1-28 to 4.1-29
<p>Construction of new HOV lanes could increase motor vehicle use and emissions if the additional roadway capacity encouraged new vehicle trips or additional VMT.</p>	LS	Based on a review of recent research regarding HOV facilities and induced travel, the Air District sought to strengthen this measure to make it more protective of air quality. Strengthening revisions to this measure include: increased enforcement of occupancy and use restrictions, extended hours of operation, increased rideshare promotion/matching, and HOV bypass lanes at metered ramps. The Air District will encourage MTC and Caltrans to identify freeway segments where conversion of existing mixed flow lanes to HOV lanes may be appropriate.	LS	Measure description (CAP Appendix E), Air District staff analysis

Potential Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation	Reference
TCM11 Install Freeway/Arterial Traffic Operating Systems This measure would result in a small increase in vehicle miles traveled and consequently an increase in emissions of PM ₁₀ .	LS	None required.	LS	1991 CAP EIR, pages 4.1-32 to 4.1-33
TCM17 Conduct Demonstration Projects No adverse environmental impacts associated with this measure have been identified.	N/A	N/A	N/A	N/A
TCM18 Implement Transportation Pricing Reform No adverse environmental impacts associated with this measure have been identified.	N/A	N/A	N/A	N/A
TCM19 Advocate Planning and Design to Facilitate Pedestrian Travel No adverse environmental impacts associated with this measure have been identified.	N/A	N/A	N/A	N/A

Potential Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation	Reference
<p>TCM20 Promote Traffic Calming Measures</p> <p>Traffic calming measures could potentially slow the response time of police, fire and other emergency response providers.</p>	LS	The Air District would strongly encourage local governments to prepare area-wide traffic calming plans prior to implementing specific measures. Traffic calming plans should be prepared with the consultation of public safety officials, area residents and business owners. Area-wide traffic calming plans could address issues such as emergency response, spillover traffic, circulation and parking patterns in specific commercial areas, and other issues.	LS	Measure description (CAP Appendix E), Air District staff analysis
<p>Traffic calming measures implemented on select and isolated streets could cause traffic volumes to increase on adjacent streets.</p>	LS	As noted above, the Air District would encourage local governments to prepare area-wide traffic calming plans. A basic objective of such plans would be to avoid spillover traffic impacts.	LS	Measure description (CAP Appendix E), Air District staff analysis

C124919953